



U.S. Department  
of Transportation

Research and  
Special Programs  
Administration

400 Seventh Street, S.W.  
Washington, D.C. 20590

**JAN 24 2005**

DOT-E 6610  
(THIRTEENTH REVISION)

EXPIRATION DATE: November 30, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Lyondell Chemical Company  
Houston, Texas  
(Former grantee: ARCO Chemical Company)

(See Appendix A for a list of additional grantees)

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of tertiary butyl hydroperoxide in DOT Specification MC 312 or DOT 412 cargo tank motor vehicles and DOT Specification IM 101 portable tanks with polyethylene saddles which are inspected at a frequency other than as specified in the Hazardous Materials Regulations. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.225(e)(4) in that the low density polyethylene saddles are inspected once every 12 months, except as specified herein.
5. BASIS: This exemption is based on the application of Lyondell Chemical Company dated November 30, 2003, submitted in accordance with § 107.109.

JAN 24 2005

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Organic peroxide type F, liquid/ Tertiary butyl hydroperoxide 70% or less in water	5.2	UN3109	II

7. SAFETY CONTROL MEASURES:a. PACKAGING -

(1) Packagings prescribed are:

(i) DOT Specification MC 312 or DOT 412 cargo tank motor vehicles meeting the requirements of § 173.225(e)(2).

(ii) DOT Specification IM 101 portable tanks meeting the requirements of § 173.225(e)(3) fitted with four (4) 2.5 inch diameter self-closing pressure relief devices.

(2) Each cargo tank motor vehicle and portable tank must include as part of the lading, low density polyethylene saddles meeting the following requirements:

(i) Specific gravity as measured by ASTM D-1248 is 0.910 to 0.925.

(ii) The weight ratio of polyethylene to peroxide solution must be at least 0.0123 by mass.

b. TESTING AND INSPECTION -

(1) Each cargo tank motor vehicle must be retested and reinspected as specified in § 180.407(c) for MC 312 or DOT 412 cargo tank motor vehicles. Each IM 101 portable tank must be retested and reinspected as specified in § 173.32b.

(2) The polyethylene saddles must be visually inspected at 12 month intervals after placement in the

**JAN 24 2005**

cargo tank or portable tank, and must be replaced when discoloration, fracture, severe deformation or other indication of unanticipated visual change is noted. All polyethylene saddles must be replaced every four (4) years.

(3) Once every three years, the melt index of a random sample of the polyethylene saddles passing visual inspection must be determined by ASTM D-1238, condition E. If the melt index is less than 0.3 (grams per 10 minutes), all saddles must be replaced. If the melt index is at least 0.3 (grams per 10 minutes), the sample saddles must be replaced with new saddles.

c. OPERATIONAL CONTROLS - Cargo tank motor vehicles and portable tanks operating under this exemption must be in dedicated service, and a nitrogen pad must be provided above the liquid.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. Each cargo tank motor vehicle must be plainly marked on the right side near the front, in letters at least 2-inches high on a contrasting background, "DOT-E 6610". Each portable tank must be marked on both sides near the middle, in letters at least 2-inches high on a contrasting background, "DOT-E 6610".

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.

10. MODAL REQUIREMENTS:

a. A current copy of this exemption must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this exemption.

JAN 24 2005

b. Cargo tank motor vehicles may not be transported in container-on-flatcar service unless approved by the Associate Administrator for Safety, FRA.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

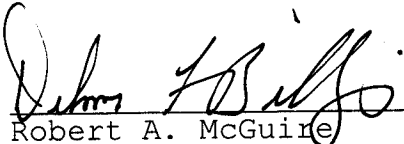
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this exemption are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports.

In addition, the grantee(s) of this exemption must notify the Associate Administrator for Hazardous Materials Safety - OHMEA, in writing, of any incident involving a package, shipment or operation conducted under terms of this exemption.

Issued in Washington, D.C.:



6<sup>n</sup> Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

**JAN 24 2005**

DATE

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.  
Attention: DHM-31.

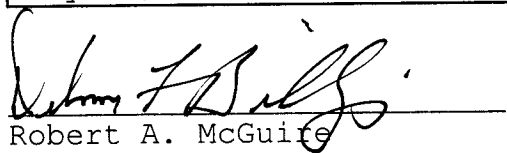
Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: AM

**JAN 24 2005**

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Degussa Corporation Elyria, OH	Jan 6, 2005	<b>JAN 24 2005</b>	Nov 30, 2005



for Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety